



**JULY 6, 2004**

## **CORN AND SOYBEAN PRODUCTION AND PRICE PROSPECTS**

While corn and soybean prices will be influenced by a number of factors over the next several weeks, production prospects will have a dominate role.

Part of the production puzzle was solved with last week's USDA *Acreage* report. Planted acreage of corn is estimated at 80.968 million acres, 2.232 million more than planted in 2003 and 1.964 million more than indicated in the March survey. The year-over-year increase in acreage has occurred primarily in Illinois, Iowa, Kansas, Minnesota, Nebraska, and North Dakota. The large increase in corn acreage was more than offset by declines in planted acreage of other feed grains, so that total feed grain acreage is down 103,000 acres. However, the USDA's projection of feed grain area harvested for grain is 519,000 acres larger than last year's harvested area. Corn acreage expected to be harvested for silage or abandoned totals 7.606 million acres, about equal to that of last year, but well above the typical area of about 7 million.

Planted acreage of soybeans is estimated at 74.809 million acres, 1.405 million more than planted last year, but 602,000 less than indicated in March. The year-over-year increase in acreage has occurred primarily in Arkansas, Mississippi, Nebraska, and North Dakota. The large increase in soybean acreage has been partially offset by a 632,000 acre decline in area planted to other oilseeds. Harvested acreage of all oilseeds is projected to be 743,000 acres larger than last year's harvested area.

The unsolved piece of the production puzzle is yield prospects, although there will continue to be some debate about the magnitude of unharvested acreage in areas that have experienced excessive precipitation. The most widely watched indicator of yield potential is the USDA's weekly report of crop conditions. That report, based on a wide spectrum of observations, is not an objective indicator of yield potential, but is the best public information about the condition of the crop. Over the past 18 years, there has been a relatively high correlation between the percentage of the crop rated good or excellent in the last report of the season and the U.S. average yield, when yields are adjusted for trend increases. Current crop condition ratings are a useful guide to yield potential, but those ratings could change significantly by the end of the season.

As of June 27, 71 percent of the corn crop and 66 percent of the soybean crop were rated in good or excellent condition. If those ratings persist through the end of the season, the U.S. average yields would project to 146.5 bushels for corn and 41.5 bushels for soybeans. Using the USDA's projection of harvested acreage, those yields would result in production of 10.748 billion bushels of corn and 3.057 billion bushels of soybeans.

Assuming that stocks of corn at the beginning of the 2004-05 marketing year are at the 806 million bushel level projected by USDA and that consumption of corn during the upcoming year is at the projected level of 10.505 billion bushels, a crop of 10.748 billion bushels would result in 2004-05 ending stocks of 1.064 billion bushels. At that level, stocks would represent 10.1 percent of consumption. Based on a model estimated over the period 1989-90 through 1997-98, a stocks to use ratio of 10.1 percent projects to a 2004-05 marketing year average farm price of \$2.58 per bushel.

Based on the 3-year average U.S. corn basis and the 5-year average monthly farmer marketings (percent of the crop marketed each month), the futures settlement prices on July 2 represented a marketing year average price of \$2.55, \$.03 below the price projected by the stocks-to-use model.

Using the same assumptions for soybeans, 2004-05 marketing year ending stocks are projected at 312 million bushels, or 10.9 percent of consumption. At that level, the stocks-to-use model projects a season's average farm price of \$6.00 per bushel. The closing futures prices on July 2 reflected a 2004-05 marketing year average farm price of \$6.38 per bushel.

The current projections from these models suggest that the recent decline in corn prices now fully reflects a very large corn crop in 2004. Soybeans prices, however, do not reflect a crop as large as projected by current crop conditions. Obviously, prices are influenced by a number of factors, so the ratio-of-stocks to use is not always an accurate indicator of average price. Even though the model has been estimated over a period thought to reflect current conditions, the results of this type of analysis should be used with caution and only as a starting point in price forecasting.

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